

**INITIAL STATEMENT OF REASONS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (HCD)  
REGARDING THE AMENDMENT OF THE 2016 CALIFORNIA GREEN BUILDING CODE (CALGREEN)  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11  
(HCD 03/16)**

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The Administrative Procedure Act (APA) requires an Initial Statement of Reasons (ISOR) to be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

**STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS:**

(Government Code Section 11346.2(b)(1) requires a statement of specific purpose of each adoption, amendment or repeal, the problem the agency intends to address and the rationale for the determination by the agency that each adoption, amendment or repeal is reasonably necessary to carry out the purpose, including the problem the agency intends to address, for which it is proposed. The statement shall enumerate the benefits anticipated from the regulatory action, including the benefits or goals provided in the authorizing statute.)

**1) The Public Problem, Administrative Requirement, or Other Circumstance Addressed**

**Administrative Requirement:** Health and Safety Code Sections 17921, 17922 and 19990 directs the Department of Housing and Community Development (HCD) to propose adoption, amendment or repeal of building standards for the protection of public health, safety and general welfare.

**2) Specific Purpose**

To amend the 2016 California Green Building Standards Code (CALGreen), Title 24, Part 11 of the California Code of Regulations (CCR) for the following programs:

- a) **State Housing Law:** relative to residential occupancies, buildings or structures accessory thereto and as provided in Health and Safety Code Section 17921.
- b) **Employee Housing Act:** relative to any building or structure or outdoors on premises or property in accordance with Health and Safety Code Section 17040.
- c) **Mobilehome Parks and Special Occupancy Parks:** relative to the use of building systems in or on any permanent buildings, accessory buildings, and structures under the ownership and control of the park operator within the park in accordance with Health and Safety Code Sections 18300 and 18620 for mobilehome parks, and Sections 18865 and 18871.3 for special occupancy parks.
- d) **Factory-Built Housing Law:** relative to residential buildings, dwellings or portions thereof, or building components, or manufactured assemblies in accordance with Health and Safety Code Section 19990.

**3) Rationale for Necessity**

The 2016 CALGreen was adopted by the California Building Standards Commission, and became effective on January 1, 2017. HCD has developed amendments to implement, interpret, and make specific provisions of state and federal law and/or to incorporate provisions that benefit the health, safety and general welfare of the people of California.

**Specific Proposed Regulatory Actions:**

HCD proposes to amend the 2016 edition of CALGreen. The proposed amendments are intended to provide clarity, specificity and direction to the code user, and to implement and make specific existing state laws and regulations. The rationale for each amendment is listed below.

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## 1. CHAPTER 2 DEFINITIONS

HCD proposes to amend Chapter 2 of the 2016 CALGreen Code as follows:

### SECTION 202 – DEFINITIONS

#### HOTEL OR MOTEL.

**Rationale:** HCD proposes to adopt the above referenced definition to provide clarification of the application of Section 4.106.4.3. The terms “Hotel” or “Motel” are used in Section 4.106.4.3, which HCD proposes to adopt. The newly proposed definition is identical to the definition used in the 2016 California Building Code, which provides sufficient information on what type of buildings are considered hotels or motels. The 2016 California Energy Code also provides a definition for “hotel/motel;” however, the definition is based on conditioned spaces within the building and related to energy use.

#### RECLAIMED (RECYCLED) WATER.

**Rationale:** HCD proposes to amend the above referenced definition. In 2014 the Department of Public Health released the drinking water standards to the State Water Resources Control Board to mandate regulations for recycled water. It is necessary to correctly identify the state entity who establishes the criteria for recycled water. The newly proposed amendment is consistent with the amendment proposed in the 2016 California Plumbing Code. There is no intended change in regulatory effect.

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## 2. SECTION 4.106 SITE DEVELOPMENT

HCD proposes to amend Section 4.106 of the 2016 CALGreen Code as follows:

#### **Section: 4.106.4 Electric vehicle (EV) charging for new construction.**

**Rationale:** HCD proposes to amend the above referenced section. The proposed amendment is necessary to incorporate the requirements for hotels/motels, newly proposed in Section 4.106.4.3.

#### **Section: 4.106.4.2.3 Single EV space required.**

**Rationale:** HCD proposes an editorial modification to Section 4.106.4.2.3. There is no intended change in regulatory effect.

#### **Section: 4.106.4.2.4 Multiple EV spaces required.**

**Rationale:** HCD proposes to amend the above referenced section. HCD proposes to add the word “required” to clarify that the underground installation of raceways and related components is required at the time of original construction. The proposed amendment provides clarity to the code user. There is no intended change in regulatory effect.

- Sections:**
- 4.106.4.3 New hotels and motels.**
  - 4.106.4.3.1 Number of required EV spaces.**
  - 4.106.4.3.2 Electric vehicle charging space (EV space) dimensions.**
  - 4.106.4.3.3 Single EV space required.**
  - 4.106.4.3.4 Multiple EV spaces required.**
  - 4.106.4.3.5 Identification.**
  - 4.106.4.3.6 Accessible EV spaces.**

**Rationale:** HCD proposes to adopt the above referenced sections, requiring installation of electric vehicle (EV) charging infrastructure for newly constructed hotels and motels. This proposal was submitted to HCD by the Air Resources Board (ARB) in September 2016 for inclusion in the 2016 Intervening Code Adoption Cycle.

The number of parking spaces required to have capability for EV charging mirrors the requirement for non-residential structures in Section 5.106.5.2. The space dimensions, identification and design are similar to the requirements for multifamily charging infrastructure.

A reference to Chapter 11B of the California Building Code is also added to direct the code user to the accessibility provisions related to EV chargers and use. References in “Notes” have been updated.

According to ARB, EV charging infrastructure in CALGreen supports the California's Zero Emission Vehicle Program, which aims to improve air quality and reduce greenhouse gas emissions. Although CALGreen has increased the required parking spaces, including EV charging infrastructure, from 3 percent (2013 code) to 6 percent (2016 code) for nonresidential uses, and requires EV charging infrastructure in 100 percent of new one- and two-family homes and 3 percent of multifamily homes (2013 and 2016 codes); there is no requirement to facilitate EV charging for hotels and motels. The availability of EV charging (when installed) at hotels and motels provides charging service to EV users traveling between their homes and vacation or other travel locations. This will help reduce range anxiety for some EV users and also provide charging while in a safe and comfortable location or even overnight. This proposal provides for infrastructure to accommodate the actual chargers when they are determined to be necessary and a needed service for the hotel/motel customers. There is no language requiring the installation of EV spaces or EV chargers; however, EV spaces and chargers may be installed depending on the needs. Providing this infrastructure at the time of construction is economical and avoids deconstruction and other more expensive changes, e.g., increasing electrical service, to accommodate EV charging retroactively.

Based upon the cost estimates, provided by the ARB, the cost to install a raceway with an adequate panel capacity is approximately \$800 per EV charging space. This represents a cost increase of only 0.1 percent. By installing EV charging infrastructure in new construction a retrofit costs of \$3,750 to \$6,975 per charging space could be avoided. Statewide, a retrofit costs of \$9.6–\$21.3 million can be avoided by installing EV charging infrastructure in new construction, which results in a benefit of \$7.5–\$18.8 million.

The technical and cost analysis, provided by ARB, is based on the need for California's Zero Emission Vehicle (ZEV) infrastructure to support up to 1 million vehicles by 2020. ARB staff used the National Renewable Energy Laboratory (NREL) plug-in electric vehicle (PEV) infrastructure assessment as the source of information on projected EV charging needs. ARB staff also gathered information on existing, funded and proposed EV charging infrastructure to determine the gap in needed charge points remaining for 2020.

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### **3. SECTION 4.303 INDOOR WATER USE**

HCD proposes to amend Section 4.303 of the 2016 CALGreen Code as follows:

<b>Sections:</b>	<b>4.303.1.3</b>	<b>Showerheads.</b>
	<b>4.303.1.3.1</b>	<b>Single showerhead.</b>
	<b>4.303.1.3.2</b>	<b>Multiple showerheads serving one shower.</b>

**Rationale:** HCD proposes to amend the above referenced sections. HCD proposes to change the required maximum flow rate of showerheads to 1.8 gallons per minute at 80 psi. Currently Sections 4.303.1.3.1 and 4.303.1.3.2 mandate a maximum flow rate of 2.0 gallons per minute.

The newly proposed amendment is consistent with the maximum flow rate adopted by the California Energy Commission (CEC) in Title 20 (Appliance Efficiency Regulations). The CEC's new mandate is based on the Governor's Executive Order B-29-15, issued on April 1, 2015.

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### **4. SECTION 4.305 WATER REUSE SYSTEMS**

HCD proposes to amend Section 4.305 of the 2016 CALGreen Code as follows:

<b>Section:</b>	<b>4.305.1 Recycled water supply systems.</b>
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**Rationale:** HCD proposes to adopt the above referenced section. The newly proposed section refers to Chapter 15 of the California Plumbing Code (CPC), which contains the requirements for alternate water sources for nonpotable applications. Pursuant to Assembly Bill 2282 (Chapter 606/Statutes of 2014), HCD is concurrently proposing adoption of mandatory measures for installation of recycled water supply systems in Chapter 15 of the CPC. This infrastructure requirement will facilitate the use of recycled water in residential landscape irrigation systems.

HCD also proposes to delete "reserved," currently located below the title of Section 4.305.

## **5. SECTION A4.303 INDOOR WATER USE**

HCD proposes to amend Section A4.303.4 of the 2016 CALGreen Code as follows:

**Section:**               **A4.303.4 Nonwater urinals and waterless toilets.**

**Rationale:** HCD proposes to amend the above referenced section. HCD proposes to modify the title and the text in Section A4.303.4 by replacing the terms “nonwater supplied urinals” and “waterless urinals” with “nonwater urinals.” The proposed modification is consistent with HCD’s proposals in the 2016 California Plumbing Code and ASME A112.19.19-2016, which use the term “nonwater urinal.”

The proposed modification provides clarity and consistency to the code user. There is no intended change in regulatory effect.

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## **6. SECTION A4.602 RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST**

HCD proposes to amend Section A4.602 of the 2016 CALGreen Code as follows:

**Section:**               **A4.602 Residential occupancies application checklist.**

**Rationale:** HCD proposes to amend the above referenced section. HCD proposes to modify the Residential Occupancies Application Checklist to correspond with the changes proposed in Chapter 4 and Appendix A4.

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### **TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS**

(Government Code Section 11346.2(b)(3) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).)

None.

### **STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS**

(Government Code Section 11346.2(b)(1) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.)

HCD is statutorily required to adopt by reference model building codes, which contain prescriptive standards. Prescriptive standards provide the following: explicit guidance for certain mandated requirements; consistent application and enforcement of building standards while also establishing clear design parameters; and ensure compliance with minimum health, safety and welfare standards for owners, occupants and guests.

Performance standards are permitted by State law; however, they must be demonstrated to the satisfaction of the proper enforcing agency.

There are no model codes addressing green building standards specific to California. However, the proposed changes follow a similar prescriptive format for consistency with other parts of the California Building Standards Code and the Title 20, Appliance Efficiency Regulations.

### **CONSIDERATION OF REASONABLE ALTERNATIVES**

(Government Code Section 11346.2(b)(4)(A) requires a description of reasonable alternatives to the regulation and the agency’s reason for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered an alternative. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.)

There were no alternatives available to HCD. HCD is required by statute to adopt model codes by reference, however, there are no model codes addressing green building standards specific to California. HCD’s proposals expand facilitation for electric vehicle use and needed charging; recognize new technology; and provide consistency within the California Building Standards Code and with the Title 20, Appliance Efficiency Regulations.

**REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS**

(Government Code Section 11346.2(b)(4)(B) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business.)

HCD has determined that this regulatory action would have no significant adverse economic impact on California small businesses.

**FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE ECONOMIC IMPACT ON BUSINESS**

(Government Code Section 11346.2(b)(5)(A) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business.)

HCD has determined that this regulatory action would have no significant adverse economic impact on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states.

**ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION.**

(Government Code Sections 11346.3(b)(1) and 11346.5(a)(10)).

HCD has assessed whether or not and to what extent this proposal will affect the following:

- The creation or elimination of jobs within the State of California.

**These regulations may create jobs for installation, maintenance and manufacturing of Electric Vehicle Supply Equipment (EVSE). No jobs are expected to be eliminated within the State of California.**

- The creation of new businesses or the elimination of existing businesses within the State of California.

**These regulations may create some special trade construction businesses. No business is expected to be eliminated within the State of California.**

- The expansion of businesses currently doing business with the State of California.

**These regulations will likely promote the expansion of businesses currently involved in EV manufacturing, installation, maintenance, use and technology development.**

- The benefits of the regulations to the health and welfare of California residents, worker safety, and the state's environment.

**These regulations will update and improve minimum existing building standards, which will provide increased protection of public health and safety, worker safety and the environment.**

**The increase in EV charging access will promote greater EV use, cleaner air by reducing greenhouse gas (GHG) emissions, and reduce CA dependency on fossil fuels. This will also provide the necessary infrastructure to support an expected 1 million ZEVs on the road by 2020.**

**ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS THAT IMPACT HOUSING**

(Government Code Section 11346.2(b)(5)(B)(i) states if a proposed regulation that is a building standard impacts housing, the Initial Statement of Reasons shall include the estimated cost of compliance, the estimated potential benefits, and the related assumptions used to determine the estimates.)

- There is a minimal cost (approximately \$1600, per EV charging space) for compliance with the new requirements for Electric Vehicle Supply Equipment in hotels/motels. Statewide costs are estimated at \$2.1 to 2.5 million from mid-2018 to the end of 2020. The cost is much less during original construction than it would be to retrofit a project later.

- Other potential benefits include, but are not limited to:
  - Continue to reduce greenhouse gas (GHG) emissions.
  - Continue the Administration's directive to adopt green building standards for residential, commercial, and public building construction as part of the building code adoption process.
  - Protection of public health and safety.
  - Environmental benefits through reduced use of energy, water, and raw materials; improved public and building occupant health due to improved indoor air quality; and overall reduction in detrimental environmental impacts.
  - General welfare of California residents.

#### **DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS**

(Government Code Section 11346.2(b)(6) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.)

These regulations do not duplicate nor conflict with federal regulations.